

MANUFACTURING EXTENSION PARTNERSHIP

Success Stories from the Field

Universal Textile Technologies

Georgia Manufacturing Extension Partnership

Soybeans Go From Field To Floor At Universal Textile Technologies

Client Profile:

Universal Textile Technologies, located in Dalton, Georgia, is the largest carpet coater in the industry, and is a division of a large, privately held corporation that tufts and dyes carpets. Universal Textile Technologies employs 62 people and supplies all carpet manufacturers including Mohawk, Shaw, and Milliken.

Situation:

Universal Textile Technologies (UTT) began working with the Georgia Manufacturing Extension Partnership (Georgia MEP), a NIST MEP network affiliate, five years ago when the company needed to conduct an air permit study. Since then, Georgia MEP has helped UTT develop toxic release and hazardous material inventory reporting, storm water pollution prevention plans, and recycling strategies. Thus, Georgia MEP was the logical choice when UTT needed help exploring environmental innovation.

Solution:

Georgia MEP heard about a new product now branded as SoyOyl™ through another NIST MEP network affiliate, the Illinois Manufacturing Extension Partnership. SoyOyl is a unique polyurethane ingredient made from soybean oil and now manufactured by Urethane Soy Systems Company, Inc. Georgia MEP brought this information to the attention of management at Universal Textile Technologies. For over two years, the research team worked to develop a soy-based substitute for use in polyurethane carpet backing. This collaboration produced a SoyOyl-based polyol--BioBalance™. Universal Textile Technologies uses the BioBalance product to coat the backs of pre-tufted and -dyed carpets. SoyOyl substitutes for a petroleum-based polyol in the polyurethane backing, making the product more friendly to the environment. The Dow Chemical Corporation, Universal Textile Technologies' raw chemical supplier, helped with efforts to bring the product to market. The company has a patent pending with the U.S. Patent and Trademark Office.

Results:

Produced an environmentally-friendly carpet backing to replace petroleum-based products.
Introduced new product to market.

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Applied for new product patent.

Anticipating increased sales and corresponding growth in employment.

Forecasting greater efficiency.

Testimonial:

"The representative from the Georgia Manufacturing Extension Partnership has been my teacher. I knew about environmental issues in general but I hadn't gone to school for it. I can still call him at any time and get updated on the latest topics of interest or concern."

Bill Harrison, Environmental Coordinator and Development Engineer